

Potential New Site:
American Nuclear Corporation
Blockhouse Valley Road
Anderson County, TN

Briefing for Regional Administrator
US EPA Region 4
March 1, 2022

Introduction

- The Tennessee Department of Environment and Conservation (TDEC) reached out informally to explore referring the site to the EPA for assessment and/or cleanup:
 - Steve Spurlin, On-Scene Coordinator
 - Leif Palmer, Regional Counsel
- Primary threat posed by the site—radiation
- The State of Tennessee owns the site.
- The State would like a comfort letter addressing its potential liability as the current owner of the site.
- Anderson County has asked for EPA assistance to get the site cleaned up. The County is developing a wildlife refuge and recreation area on a closed landfill adjacent to the site and wants to incorporate the site in the development.

American Nuclear Corporation (ANC)

- ANC manufactured X-ray heads and other medical products using radioactive isotopes.
- Licensed by the Atomic Energy Commission in 1962:
 - to possess, fabricate and transfer millicurie quantities of radioactive materials
 - to receive and transfer curie quantities of radionuclides Co^{60} (Cobalt 60) and Cs^{137} (Cesium 137) as sealed sources provided these sources were not removed from the approved shipping containers
 - to use of up to 20 curie of Sr^{90} (Strontium 90) as an unsealed source
 - to operate a "Hot Cell"

Compliance Issues

- Throughout the late 1960s, the State found numerous compliance issues at the site:
 - improper storage of radioactive material
 - possession of unlicensed radioactive material
 - failure to perform leak tests
 - improperly performing leak tests
 - over-exposure of personnel to radiation
- In 1972, the site was found to be abandoned.
- Future Investments, Inc. bought the site from bankruptcy trustee; failed to comply with use restrictions
 - Krazy Bob's Auto Parts
 - Unauthorized digging for septic tank
 - Unauthorized hay cutting

Closure Actions in the 1970s

- In 1971, upon recommendation of Oak Ridge National Laboratory (ORNL) physicists, the State ordered ANC:
 - to fill the evaporator pit, waste tank, and filter pit with concrete; and
 - to weld shut the metal door to the Hot Cell building.
- In 1974-75, the State contracted with the Atomic Energy Commission and ORNL to decontaminate/clean up bulk radioactive material and contaminated surface soil.
- **Contamination remains in the concrete-filled waste system, drain lines, storage trench, hot cell building, and subsurface soil.**

State Acquisition of Site Property

- 1975—Commissioner of the TN Department of Public Health asked the Governor to condemn site
- 1977—Governor Blanton agreed that the site could be condemned
- 1977—Condemnation halted due to agreement with interim site owner
 - Conveyed Hot Cell building to State by quitclaim deed (1980)
 - Set limits on excavation
 - Required that any part of the site used for parking or storage be graveled or paved
 - Allowed the State access to the site in perpetuity
- 1986—State acquired the remainder of the site by quitclaim deed according to State law pertaining to radioactive property held to protect public health

Current Site Status

- The site is fenced, but there has been vandalism.
- The Hot Cell building, which is the primary source of radiation, has been sealed shut since the 1970s.
- The site is managed by the TDEC's Division of Radiological Health.
 - Monthly survey readings inside and outside the perimeter fence
 - Monthly samples from a spring that leaves the site
 - Quarterly sample from downstream Braden Branch Creek
 - Quarterly analysis of passive dosimeters around perimeter points and near the Hot Cell building
 - Annual grid survey
 - Annual sediment samples

Hot Cell Building

- (b)(5)

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Removal Site Evaluation

- (b)(5) [REDACTED]
- (b)(5) [REDACTED]
- (b)(5) [REDACTED]
- (b)(5) [REDACTED]
- State will likely seek EPA assistance to evaluate the site.

Letters from Anderson County

- Anderson County has written two letters to the EPA seeking assistance in getting the site cleaned up:
 - July 19, 2021
 - January 21, 2022
- County is planning to build the Blockhouse Valley Nature Preserve and Outdoor Research Center.
- Most recent letter claims:
 - Site is insurmountable obstacle to proposed nature preserve
 - Citizens are exposed to radiation on a daily basis, causing substantial threat to their health
 - Site is a harmful legacy

The BUILD Act & Enforcement Discretion

- State would ordinarily be liable for cleanup costs as the current owner of the site.
- Brownfields Utilization, Investment, and Local Development Act of 2018 (BUILD Act)
 - Amended CERCLA Section 101(20)(D) to create exemption from owner or operator liability where the unit of state or local government acquires title to property “**by virtue of its function as sovereign.**”
 - Removed requirement that the properties must be acquired “involuntarily”
- According to EPA guidance, the EPA expects to use its enforcement discretion when a local government acquires title to a property via **a function that can only be effectively performed by governments.**

“By Virtue of Its Function as Sovereign”

- 1976 letter from the Commissioner of Public Health to the Governor making a second request that the Attorney General condemn the ANC site:
 - “It is our feeling, supported by the Nuclear Regulatory Commission (formerly the Atomic Energy Commission), that the property can best be secured for the benefit of the public if owned by the State and maintained within the custody of this Department.”
- State authority used to acquire remainder of the site applicable only:
 - “To provide the necessary services to protect the public health, safety or welfare at contaminated sites or at abandoned, inoperative, or decommissioned facilities owning, storing, or otherwise possessing radioactive materials”
- EPA decision would be documented in a comfort letter.